



Appl. No. 09/890,752  
Amdt. Dated December 17, 2003  
Reply to Office Action of June 17, 2003  
Replacement Sheet

atgggccgtggcgaaggagctggagcattcgggctgggttcacccaccgcacggaggcctttggggtggagccctcaggctca  
gggcatactacaaactttgccagaaatccgcctcctgcctccaccaatgccagacaggaaggcagcctaccccgctgtctccact  
ttgagaaactcatcctcaggccatgcagtggaaatccacaaccttcacaaactctgcaagatcccagagtggagggcctgtatttc  
cctgtggtggctccagttcaggagcagtaaaccctgttcgactactgcctctcccttatcgtaactctctcaggattggggaccctg  
5 cgctgaacatggagaacatcacatcaggattcctaggacccttctcgtgttacaggcggggttttctgttgacaagaatcctcacaat  
accgcagagtctagactcgtggtggacttctcaattttctagggggaactaccgtgtgtcttgccaaaattcgagctcccaacctcc  
aatcactaccaacctcctgtcctcaactgtcctgggtatcgctggatgtgtctgcggcggtttatcatcttcttctcctgtctgtatg  
cctcatcttctgttggttcttctggactatcaaggatgttgcctgttctccttaattccaggatcctcaaccaccagcacgggaccatg  
ccgaacctgcatgactactgctcaaggaacctctatgtatccctcctgttctgtaccaaaccttcggacggaaattgcacctgtattccc  
10 atcccatcatcctgggctttcggaaaattcctatgggagtgggcctcagcccgtttctcctggctcagtttactagtgcatttgttcagtgg  
ttcgtagggctttcccccactgtttggcttctcagttataggatgatgtggtattgggggccaagtctgtacagcatcttgagtccttttac  
cgctgttaccattttctttgtctttgggtatacatttaaac (SEQ ID NO: 4)

MGRGDGAGAFGLGFTPPHGGLLGWSPQAQGILETLPANPPPASTNRQSGRQPTPLSP  
PLRNTHPQAMQWNSTTFHQTLQDPRVRGLYFPAGGSSSGTVNPVPTTVSPISSIFSRIG  
15 DPALNMENITSGFLGPLLVLQAGFFLLTRILTIPQSLDSWWTSLNFLGGTTVCLGQNS  
QSPTSNHSPTSCPPTCPGYRWMCLRRFIIFLLCLIFLLVLLDYQGMLPVCPLIPGSS  
TTSTGPCRTCTTPAQGTSMYPSCCCTKPSDGNCTCIPISSWAFGKFLWEWASARFS  
WLSLLVPFVQWVGLSPTVWLSVIWMMWYWGPSLYSILSPFLPLLPIFFCLWVYI  
(SEQ. ID NO: 1)

20

FIG. 1



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atgcccatatcgtaacttctcgaggattggggaccctggatccactactgttcaagcctccaagctgtgccttgggtggctttggggc  
atggacatcgaccctataaagaattggagctactgtggagtactctctgttttgccttctgacttcttctcctcagtagagatcttctaga  
taccgcctcagctctgtatcggaagccttagagtctcctgagcattgtcacctcaccatactgcactcaggcaagcaattcttctgtgg  
ggggaactaatgactctagctacctgggtgggtgttaatttgaagatccagaattccgagcgacgcgtctagagacctagtagtcag  
5 ttatgtcaacactaatatgggcctaaagttcaggcaactcttgtggttcacatttctgtctcacttttgaagagaaaccgttatagagtatt  
tggtgtcttctggagtgtggattcgactcctccagcttatagaccaccaaagccctatcctatcaacactccggaaactactgttgta  
gacgacgaggcaggtcccctagaagaagaactccctgcctcgagacgaaggtctcaatcgccgcgtcgagaagatctcaatct  
cggaacctcaatgttagtattcc (SEQ ID NO: 3)

MPLSSIFSRIGDPTVQASKLCLGWLWGMDIDPYKEFGATVELLSFLPSDFFPSVRDLL  
10 DTASALYREALSPEHCSPHHTALRQAILCWGELMTLATWVGVNLEDPEFRGDASR  
DLVVS YVNTNMGLKFRQLLWFHISCLTFGRETVIEYLVSFGVWIRTPPAYRPPNAPIL  
STLPETTVVRRRGRSPRRRTSPRRRRSQSPRRRRSQSREPQC (SEQ ID NO: 2)

**FIG. 2**